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EXAMINER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *01 March 2010*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *42-55 and 57-60* is/are pending in the application.

    4a) Of the above claim(s) *1-41 and 56* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *42-55 and 57-60* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *20070122*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

Examiner's Detailed Office Action

1.   This Office Action is responsive to amendment filed on March 1st, 2010;

▪   Claims 1 – 41, 50 and 56 were cancelled;

▪   Claims 57 – 60 are further presented in the amendment;

▪   Claims 42 – 49, 51 – 55 and 57 – 60 are presented for continued examination.

Response to Arguments

Claim Rejections - 35 USC § 103

2.   Applicants amend the claims to specifically pointing out the invention regarding

"mechanical or electronic assembly components for assembly into product", which disqualify

prior **Frank** and **Hansmann** as prior arts. However, the invention using transponder or RFID in

component supporting field recording information for inventory control can be found well

known in the world; the examiner further cites analogous art references for teaching applicants'

invention herein.

3.   Regarding Applicants' arguments to the combination of four references in prior rejections

which is respectfully disagreed, however, the new amendments to the claims indeed disqualify

two of the references; therefore, the forth rejections has been withdrawn; and new references, in

analogues art, have been further cited for new rejections herein current office action.

4.   Regarding claim 43, Applicants argue **Reihl** teaches away from applicants' invention that a transponder stores a common quality score, which is respectfully disagreed. Applicants amend the term "comprises" to be "has", however, still using "**the** transponder", since **Reihl** teaches the transponder can be attached by way of a "holder", "**the** transponder" can be placed with the frame instead of the container as claimed, still providing the same information for the components; further, if a different transponder is used to store information, **Can** teaches a transponder, RFID technology which can further be used to store information for delivery of the objects as a whole to assembly site.

5.   Regarding claim 51, Applicants amend the claim and further argue the amended limitations are not disclosed by **Reihl**, which is agreed. However, simply adding a transponder on an assembled product storing information from the individual part's transponder is not considered to be patentable. **Reihl** teaches data stored in the transponder can be supplied to an assembled product, for example: printer or copier devices; cartridges installed into printers can be treated as an assembled product; if for a different transponder was claimed, **Can** has been cited for teaching transponder, RFID technology herein for storing information from the transponder of the individual part.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1.   Determining the scope and contents of the prior art.
2.   Ascertaining the differences between the prior art and the claims at issue.
3.   Resolving the level of ordinary skill in the pertinent art.
4.   Considering objective evidence present in the application indicating obviousness or nonobviousness.

Regarding **claims 1 – 41**,

(Cancelled)

6.   **Claims 42**, **53**, **55** and **56 are rejected** under 35 U.S.C. 103(a) as being unpatentable over **Reihl** reference and in view of Ruth Frank (U.S. P.G. Pub. No. 2002/0087438, hereinafter **Kunieda**) and further Necmettin Can et al. (U.S. P.G. Pub. No. 2002/0038267, hereinafter **Can**).

      Reihl teaches,

▪   A method for controlling material flow in production of a product comprised of a plurality of individual mechanical or electronic assembly components as parts or part aggregates, [assure the correct delivery of consumables in printer and copier devices in order to be able to process consumables of different types in the devices, col. 2, lines 28 – 31] for assembly into said product, comprising the steps of:

- producing said individual parts or part aggregates at a supplier production site; [After the end of the filling procedure, the necessary, variable data such as type of toner and toner fill quantity are transmitted into the variable memory areas of the transponder 13 as well as into the data bank, col. 7, lines 45 – 48]

- recording production and delivery data regarding the individual parts or part aggregates [containers are delivered with a transport vehicle and are pre-selected in a position with the data of the transponder, col. 7, lines 3 – 10], and in addition to said production and delivery data also recording quality data comprising at least one tolerance value range [toner expiration dates] regarding the individual mechanical or electronic assembly components as said parts or part aggregates [toner expiration dates for the consumables are identified and noted, Abstract]; storing said production and delivery data and said quality data in an individual transponder physically connected to each individual part or individual part aggregate; [the containers can continue to comprise labels readable in clear text that contain the respective identifier of the transponder integrated in the container and also contain data about the container content as well as the filling date, expiration date, name of the filler, owner of the container, intended place of employment (customer), etc., col. 14, lines 33 – 47]

- delivering said individual parts or part aggregates to a goods receipt of a logistic system; [9, 11 fig. 2; sum of those data that are transmitted via the write station 11 into the transponder 13 are simultaneously entered into a data bank 9 within the filling station 3, col. 7, lines 24 – 28; the cleaned and tested containers are intermediately stored in a warehouse, col. 7, lines 13 – 15],

- reading said production and delivery data from the transponder at said goods receipt and using the data for controlling further material flow such that the individual parts or part aggregates are transported in a controlled manner to predetermined, subsequent assembly process stations at an assembly production site for said product; [After cleaning, the containers 2--in a position 2/5--pass through a testing station 6 at which they are checked for mechanical damage as well as for leaks. The leak test occurs with a compressed air unit. Subsequently, the cleaned and tested containers 2 are intermediately stored in a warehouse 7 (2/6). Containers that are to be filled with toner are supplied directly to the filling station 3; containers that are to be re-employed as waste disposal containers are supplied directly to the transport vehicle 10 that outputs the containers in the direction to the printing center. For distinguishing between toner supply containers and waste disposal containers, these are correspondingly identified as toner or waste supply containers in the transponder, col. 7, lines 11 – 23]

- before storage, reading and checking said quality data at least one tolerance value range at a quality check station of said assembly production site; and if the quality check yields that said mechanical or electronic assembly components as said delivered parts or part aggregates lie outside of the at least one tolerance value range, rejection and return is automatically activated; [a check is then carried out to see whether the toner recipe is acceptable and, potentially, the developer station is enabled for printing, col. 12, lines 2 – 4]

Reihl further teaches assembling said product from said electronic mechanical assembly components [the container is inserted into a printer (see col. 6, lines 43 – 47)]

Reihl does not teach taking in parts by an operator and storing them in storage until they are required; detecting a removal of an individual part from the storage or with a transponder reader; triggering a payment obligation for the operator upon removal of the individual part from the storage; or before storage, reading and checking said quality data;

Kunieda, in an analogous art, teaches taking in the individual parts by a production site operator and storing them in a production site storage until they are required for production; and detecting a removal of an individual part from the production site storage or its assembly in an aggregate of the product, triggering a payment obligation [the components are delivered into the warehouse, the ownership is not transferred, and the components still remain the contractor's property. Thereafter, the components discharged from the component warehouse are used in the component assembly, the intermediate products are manufactured, and the intermediate product stock results. The intermediate product stock is also left in the contractor's property without transferring the ownership. Thereafter, the intermediate products are released to the company "A" in response to the release instruction, and the ownership of the intermediate products shifts to the company "A" for the first time at the release (the payment is made to the vender) (see Pp[0060])] for the purpose of improving stability of stock procurement (see Pp[0061 – 0062]);

However, **Kunieda** does not teach using transponder or RFID tags to control the storage;

Can, in an analogous art, has been further cited for teaching the usage of transponder or RFID tags in controlling/tracking inventory travel which can be found all over the specification for assisting with inventory control (see at least Pp[0026]);

Kunieda also teaches a quality control for reception quality check before storage, and if the quality check yields that said delivered parts or part aggregates lie outside of the at least one

tolerance value range, rejection and return is automatically activated [acceptance test (see fig. 9E

and 9F, Pp[0078], further detail can be found in Pp[0094 – 0095])]; for providing quality control

(QC).

It would have been obvious to a person of ordinary skill in the art at the time of

applicant's invention to modify the teaching of **Reihl** to include "taking in parts by an operator

and storing them in a storage until they are required; detecting a removal of an individual part

from the storage or with a transponder reader; triggering a payment obligation for the operator

upon removal of the individual part from the storage", for the purpose of improving stability of

stock procurement (see **Kunieda** Pp[0061 – 0062]), and assisting with inventory control (see

Can at least Pp[0026]).

Regarding **claims 43** and **58**,

Reihl teaches the method according to claim 22 wherein

- at least one group of the individual parts is a mass production article that is delivered at the

  goods receipt in a quantity of more than five in a container, [7, fig. 2] and wherein the

  container has

- **the** transponder in which is stored a common quality score regarding the group of mass

  production articles of the container. [a holder provided at the container can also be utilized

  (see col. 6, lines 24 – 30); Containers that are to be filled with toner are supplied directly to

  the filling station 3; containers that are to be re-employed as waste disposal containers are

  supplied directly to the transport vehicle 10 that outputs the containers in the direction to the

  printing center, col. 7, lines 16 – 20]

Can, in an analogous art, teaches transponder, RFID tag storing information [0010 –

0019] for assisting with inventory control (see **Can** at least Pp[0026]);

The examiner further explains, Applicants amend the term "comprises" to be "has",

however, still using "**the** transponder", since **Reihl** teaches the transponder can be attached by

way of a "holder", "**the** transponder" can be placed with the frame instead of the container still

providing the same information for all components; further, **Can** teaches a transponder, RFID

technology which can be further used to store information for delivery of objects.

Regarding **claim 44**, **Reihl** teaches the method according to claim 24 wherein

▪ information about a quantity of the plurality of the articles located in the container is

additionally stored in the transponder. [… these are correspondingly identified as toner or

waste supply containers in the transponder, col. 7, lines 16 – 22; the examiner explains,

quantity can be simply "to be filled" or "re-employed" as disclosed by **Reihl** reference]

Regarding **claim 45**, **Reihl** teaches the method according to claim 22 wherein

▪ at least one of reading **or** writing of data at the transponder occurs with a mobile computer

[an antenna via which a wireless data transfer to a read station 65 can occur, col. 11, lines 6 –

11; 26a, microcontroller, fig. 8; since the "mobile computer" does not have further

limitations for the "mobile computer", **Reihl** reference teaches a read station which can be

used for wirelessly reading or writing data with the transponder] that comprises

▪ a first interface for wireless communication with the transponder and a second interface for

communication with a computer network. [an antenna via which a wireless data transfer to a

read station 65 can occur. The read station 65 can be optionally secured to the developer

station 14 or to the printer housing and is connected to the process control arrangement 40

via a cable connection (for example, CAN bus), col. 11, lines 6 – 11]

Regarding **claim 47**, **Reihl** teaches the method according to claim 22 wherein

- at least one individual part is **housed** in a package and the transponder is attached on the

  package. [13, 2/1, fig. 1; the examiner further explains, one individual part of a housing can

  be item "2/1" and item "13" is the transponder which is attached on the package]

Regarding **claim 48**, **Reihl** teaches the method according to claim 22 wherein

- an aggregate-related transponder is added to an aggregate, and data about the aggregate are

  stored in the transponder. [… display static information … the type of consumable …

  updating of the quantity of consumable contained in the container are suitable as information

  carrier rigidly connected to the container … in particular, transponders are also suitable for

  this purpose, col. 3, lines 53 – 65; the container can be an "aggregate"]

Regarding **claim 49**, **Reihl** teaches the method according to claim 22 wherein

- the input is recorded at the goods receipt by means of the transponder data. [data stored in the

  transponder can be supplied to other system components such as a filling station, a central

  computer with a data bank, and the printer or copier devices, Abstract; 9, 11 fig. 2; sum of

  those data that are transmitted via the write station 11 into the transponder 13 are

  simultaneously entered into a data bank 9 within the filling station 3, col. 7, lines 24 – 28]

Regarding **claims 51** and **59**,

Reihl teaches the method according to claim 22 wherein

- the data belonging to an individual part or individual part aggregate and stored on its

  connected transponder, are stored on a further finished product transponder located on said

  assembled product in a finished state [data stored in the transponder can be supplied to other

  system components such as a filling station, a central computer with a data bank, and the

  printer or copier devices, Abstract; 9, 11 fig. 2; sum of those data that are transmitted via the

  write station 11 into the transponder 13 are simultaneously entered into a data bank 9 within

  the filling station 3, col. 7, lines 24 – 28]

    the examiner further explains, **Reihl** teaches data stored in the transponder can be

    supplied to an assembled product, for example: printer or copier devices; cartridges

    installed into printers can be treated as an assembled product.

    Can, in an analogous art, teaches transponder, RFID tag storing information [0010 –

0019] for assisting with inventory control (see **Can** at least Pp[0026]);

    Regarding **claim 52**, **Reihl** teaches the method according to claim 22 wherein

- the data are at least one of recorded, stored or generated in a computer program [the toner

  type, the color thereof as well as the filling level of the container are, for example, binarily

  encoded in the memory (EEPROM) of the toner supply container and are thus stored in

  machine-readable form, col. 11, lines 16 – 20] and

- at least one of the material flow **or** production process are controlled by a computer [The

    filling procedure is controlled by a filling computer (microprocessor 52) that is connected via

    a suitable data line or, respectively, via a network connection to a central computer 51 that

    contains the data bank 9, col. 14, lines 8 – 12; assure the correct delivery of consumables in

    printer and copier devices in order to be able to process consumables of different types in the

    devices, col. 2, lines 28 – 31].

Regarding **claims 54**, **57** and **60**, said read system, when reading and checking said

quality data at least one tolerance value range at said quality check station, determines whether

the delivered individual parts or part aggregates lie outside of said at least one tolerance value

range,

Kunieda also teaches deviating data is additionally stored [return defectives, test result

notice, acceptance test (see fig. 9E and 9F, Pp[0078]); for providing quality control (QC).

Can, in an analogous art, has been further cited for teaching the usage of transponder or

RFID tags in controlling/tracking inventory, travel which can be found all over the specification

[specially in [0010 – 0019] for assisting with inventory control (see at least Pp[0026]).

7.   **Claim 46 is rejected** under 35 U.S.C. 103(a) as being unpatentable over **Reihl** reference.

    Reihl teaches the method according to claim 26 wherein

- a communication occurs via the <u>computer network interface</u>. [a data network, for example

    via a local area network LAN, via a wide area network WAN or via an Internet connection,

    col. 14, lines 16 – 20]

Reihl reference does not teach, the network is wirelessly connected;

However, it is well know in the art that "wireless" is a cable replacement connection,

since there is a network disclosed by **Reihl** reference, it is well know can be replaced by a

wireless connection.

Conclusion

8.   Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is

reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Correspondence Information

9.   Any inquires concerning this communication or earlier communications from the

examiner should be directed to Sunray Chang, who may be reached Monday through Friday,

between 6:00 a.m. and 3:00 p.m. EST. or via telephone at (571) 272-3682 or facsimile

transmission (571) 273-3682 or email sunray.chang@uspto.gov.

        If you need to send an Official facsimile transmission, please send it to (571) 273-8300.

        If attempts to reach the examiner are unsuccessful in the regular office hour, the

Examiner's Supervisor, Albert Decady, may be reached at (571) 272-3819.

Sunray Chang
Art Unit 2121

/Albert DeCady/
Supervisory Patent Examiner, Art Unit 2121
June 10, 2010